

# Amphenol

phenol Corporation

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**By Telecopy and  
Overnight Delivery**

**RECEIVED**

FEB 12 1996

**OFFICE OF RCRA  
WASTE MANAGEMENT DIVISION  
EPA, REGION V**

February 9, 1996

Mr. Paul Little  
Chief, MI/WI Enforcement Section  
Enforcement & Compliance Assurance Branch  
U.S. EPA, Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

Re: Administrative Order on Consent dated November 27, 1990  
Franklin Power Products Co./ Amphenol Corporation (Respondents)  
IND 044 587 848

Dear Mr. Little:

In accordance with the agreements reached at our meeting of January 31, 1996, I have enclosed a work plan and schedule for the performance of investigative activities leading to the preparation of a supplement to the Corrective Measures Study (CMS) report. We plan to include a report on the data collection activities as a technical memorandum attached to the Supplemental CMS report as an appendix. I trust this format will be acceptable. Pursuant to the above agreement, and upon approval of the enclosed plan, USEPA has agreed to rescind its imposition of all stipulated penalties, as described in its November 14, 1995 letter, as well as any other fines, interest or other penalties it may have sought to assess with respect to this particular matter.

The schedule is based on elapsed time rather than specific dates for compliance. This was done primarily to take into account the time it may take EPA to review and approve this work plan and potential timing problems which could result from our request to the City of Franklin to perform work in their right-of-way. Aside from these two matters, which are outside our control, we believe that the presented schedule is aggressive but achievable and is within the time frame discussed at our meeting.

Please contact me at (203)265-8760 if you have any questions regarding the enclosed.

Sincerely,

Samuel S. Waldo

Director, Environmental Affairs

Distribution:

J. M. Jarvis, Franklin Power Products  
J. H. Keith, EarthTech  
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T. Linson, IDEM  
S. Gard, Esq., Franklin Power Products  
P. Perez, Esq., Amphenol  
L. Johnson, Esq., USEPA

February 9, 1996

Sam Waldo  
 Director, Environmental Affairs  
 Amphenol Corp.  
 358 Hall Avenue  
 Wallingford, CT 06492-7530

**Subj: Work Plan and Schedule for Additional CMS Work on Forsythe Street**

Dear Mr. Waldo:

This work plan describes the tasks and schedule to address ground water quality and subsurface conditions along Forsythe Street between Hamilton Avenue and Hurricane Creek in Franklin, Indiana (Operable Area 3 in the CMS report). The work will be undertaken pursuant to the understanding reached at our 1/31/96 meeting with EPA Region 5.

#### **Description of Tasks**

The tasks described below will address the following:

1. Levels of VOCs, metals, and total and amenable CN in Unit B ground water, particularly trichloroethene (TCE) and tetrachloroethene (PCE);
2. Levels of these constituents in subsurface soils;
3. Aquifer characteristics of the saturated portion of Unit B;
4. Physical characteristics of subsurface soils relating to possible corrective measures;
5. Other ground water parameters relating to possible corrective measures;
6. Locating and determining the elevations (if possible) of the intersection of the saturated portion of Unit B with the bed of Hurricane Creek;
7. Completing a supplement to the CMS report addressing possible corrective measures in Operable Area 3.

#### **Task 1 - Secure Necessary Permits for Off Site Work**

A copy of this work plan will be forwarded to Mr. Rick Littleton, Superintendent of the Franklin Board of Public Works. Permission will be requested to install the wells described in Task 2 within the public right-of-way along the east side of Forsythe Street and Ross Court (see attached Figure). The Board generally meets on the second and fourth Tuesdays of the month.

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### Task 2 - Install Ground Water Monitoring Wells

Four monitoring wells will be installed at locations shown in the attached Figure. Well MW-31 is placed near an apparent TCE "hot spot" near PGP-9, about 200 feet north of the entrance to Ross Court (see CMS report, Appendix A, Sheet 6D). Wells MW-32 and MW-33 will ground water flow, and the potential for movement of contaminants beneath the Forsythe Street sanitary sewer. Well MW-34 will provide additional information about subsurface conditions between the "hot spot" and Hamilton Avenue. Well MW-31 may be constructed of 4-inch Schedule 40 PVC with 0.010-inch slotted screen for use in pump tests if the saturated zone is thick enough. Wells MW-32, -33, and -34 will be constructed of threaded 2-inch Schedule 40 PVC with 0.010-inch slotted screen. Ten-foot screen lengths were used at the RFI site, but because the saturated portion of Unit B will be shallower and thinner, we expect to use 5-foot screens for most wells. The determination of actual well size and screen length will be determined in the field, as will the final location of MW-34. Wells will be installed and developed as outlined in the IT Work Plan and the RFI/CMS QAPjP, except that a locking flush mount cap will be provided instead of a stickup protective cover. Cuttings will be drummed and returned to the Hurricane Road facility for storage prior to disposal.

### Task 3 - Determine Subsurface Soil Conditions

Each of the four well borings will be continuously sampled by split spoon, screened with a PID and described by an Earth Tech geologist as outlined in the IT Work Plan and the RFI/CMS QAPjP. Two soil samples will be collected at each boring location, one from a depth interval that encompasses the sanitary sewer (approximately 6-8 feet), and one from just above the water table (approximately 11-13 feet). These sampling intervals may be revised in the field based upon screening results. Analyses of soil samples for VOCs, metals and cyanides will be conducted as outlined in the IT Work Plan and the RFI/CMS QAPjP. Table 1 summarizes all sample information for soils. Additional soils will be collected from the two sample intervals and submitted to a local geotechnical laboratory for grain size analysis (ASTM D-422).

### Task 4 - Determine Unit B Aquifer Characteristics

Following installation of the monitoring wells, each well location will be surveyed, and the top of casing (TOC) and ground elevation will be determined. One round of tapedown measurements will be made at the four new wells, and on the Hurricane Road property (excluding the ICM pumping wells). We anticipate that ground water conditions along Forsythe Street may preclude the use of a full pump test at the four monitoring wells. If this is the case, we propose to use mini-rate pump tests using a data logger and pressure transducer as for the RFI. With the permission of the City of Franklin, pump water will be discharged into the sanitary sewer. Unit B hydraulic conductivity and transmissivity will be determined from the pump test data. Permeability will be calculated from grain size analyses conducted under Task 3. A Unit B contour map will be generated based on the tapedown results.

#### Task 5 - Determine Unit B Ground Water Quality

One round of ground water samples will be collected from each of the four new monitoring wells. To establish some continuity with the RFI site, we recommend collecting a set of water samples from MW-12 as well. Analyses of water samples for VOCs, metals and cyanides will be conducted as outlined in the IT Work Plan and the RFI/CMS QAPjP. Table 1 summarizes all sample information for ground water. Water samples will be collected unfiltered for all parameters, including metals and cyanides. The parameters Hardness, pH, alkalinity, conductivity, TDS, DO, TSS, Ca, Mg, Mn and Fe (no CLP-like data package) will be used in design considerations during the evaluation of possible corrective measures involving ground water treatment. DO, pH and conductivity will be measured by Earth Tech in the field.

#### Task 6 - Determine Relationship of the Saturated portion of Unit B With Hurricane Creek

Field observations suggest that the saturated portion of Unit B may discharge to Hurricane Creek near the storm sewer outfall. The bed of Hurricane Creek appears to be entrenched in Unit C between the Forsythe Street Bridge and the storm sewer outfall. The north bank of Hurricane Creek and the stream bottom will be investigated visually in an effort to determine:

- At what point on Hurricane Creek upstream from the storm sewer does apparent recharge from the north bank begin;
- At what point on Hurricane Creek does the stream bottom begin entrenching into Unit C;
- At what point downstream is the base of Unit B above stream level, and is there apparent recharge from Unit B at this location;
- The stream bottom gradient between the storm sewer outfall and the bridge.

This information may or may not be obtainable, depending upon conditions along the creek. There are indications that Hurricane Creek has been channelized in the past. Excavating and spoil dumping may have obliterated stream bank features to the extent that Unit B and C contacts cannot be identified by simple observation. High water or bank-full flow conditions could also prevent the identification of bank features. If Earth Tech can locate these features, they will be flagged and the locations and elevations surveyed and related to other on- and off site features. The stream bottom elevations and gradient between the Forsythe Street Bridge and the storm sewer outfall will be determined in any case.

#### Task 7 - Prepare CMS Report Supplement for Operable Area 3

Possible corrective measures for Operable Area 3 will be proposed and evaluated based on knowledge about Forsythe Street gained during the RFI and the present field work. The supplement is a separate document, with figures, tables, sheets and appendices. It will be distributed with the CMS report by EPA Region 5 for public review and comment.

## Reports

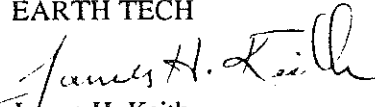
Monthly progress report will be submitted to EPA Region 5 by the 10th of each month beginning in March, 1996, through the completion and submittal of the draft report.

## Schedule

See attached Table 2. The project will upon approval of this work plan by EPA Region 5, and upon the granting of a license by the Franklin Board of Public Works to install monitoring wells within the city right-of-way.

Very truly yours,

EARTH TECH



James H. Keith  
Project Manager

cc: Larry Johnson, EPA Region 5  
Sam Waldo, Amphenol Corp.  
Mike Jarvis, Franklin Power Products  
Susan Gard, SerVaas, Inc.  
Thomas Linson, IDEM  
Rick Littleton, Franklin Board of Public Works

Table 2. Proposed Schedule

Task No.	Week											
	1	2	3	4	5	6	7	8	9	10	11	12
1*												
2												
3												
4												
5												
6												
7												

\* - The project will begin only after EPA approval of the Work Plan, and completion of Task 1

Table 1. Sample Summary

Matrix	No. Samples	Analysis/ Container	Blanks (eqpt./trip)	Dupes	MS/D	Preservative	Holding Time
Water	5	VOCs, 2-40 ml VOA	1/1	1	2	Cool 4° C; HCl pH<2	14 days
	4	Metals, 1 L poly (includes Ca, Mg, Mn and Fe)	1/0	1	0	Cool 4° C; HNO3 pH<2	6 mos, Hg-14 days
	4	Total CN, 1 L glass, Amenable CN, 1L glass	1/0	1	0	Cool 4° C; NaOH pH>12	14 days
	4	Hardness *	0/0	0	0	Cool 4° C	6 mos
		Alkalinity *				Cool 4° C	14 days
		TDS, TSS *				Cool 4° C	7 days
Soil	8	VOCs, 125 ml VOA	1/1	1	2	Cool 4° C	14 days
	8	Metals Total/Amenable CN, 1 L glass	1/0	1	0	Cool 4° C	metals 6 mos CN 14 days
	8	grain size (ASTM D-422), 1 L glass	0/0	0	0	none	none

\* - a sample for these parameters will consist of a 1L glass jar, cooled to 4° C; no preservative.



